

Problem Set 1

1. List the players, the actions for each player, and the preferences in the Bach or Stravinsky game.
2. Recall the “Golden Balls” game that we discussed in class; the clip can be found at <http://www.youtube.com/watch?v=p3Uos2fzIJ0>.
 - (a) List the players, the actions for each player, and the preferences in this game.
 - (b) Draw a game matrix for this game.
 - (c) Are players’ preferences in this game identical to players’ preferences in the Prisoner’s Dilemma?
 - (d) What is the Nash equilibrium (equilibria) of this game? Why?
3. Two animals are fighting over some prey. Each can be passive or aggressive. Each prefers to be aggressive if its opponent is passive, and passive if its opponent is aggressive. Given its own stance, it prefers the outcome in which its opponent is passive to that in which its opponent is aggressive.
 - (a) List the players, the actions for each player, and the preferences in this game.
 - (b) Draw a game matrix for this game.
 - (c) Does this game resemble any classic game that we have discussed in class? Why?
 - (d) Are there political settings that this game approximates? If yes, give examples.
 - (e) What is the Nash equilibrium (equilibria) of this game? Why?